

CSE 451: Computer Networks

Data Communications and Networking (Fourth Edition): Behrouz A Forouzan

1. Chapter 1 (Introduction): Full
 - a. Exercise-1, 2, 5, 8, 17, 18, 19, 23
2. Chapter 2 (Network Models): Full
 - a. Exercise-1-15, 21, 25
3. Chapter 4 (Digital Transmission): page 101-115 (up to Block Coding)
 - a. Exercise-13, 17, 21, 26, 28, 30
4. Chapter 10 (Error Detection and Correction): page 267-296, 298-301 (Burst Error excluded)
 - a. Exercise-1-10, 12-15, 23-30
5. Chapter 11 (Data Link Control): page 307-310 (Framing)
 - a. Exercise-20, 31
6. Chapter 12 (Multiple Access): Full
 - a. Exercise-1, 2, 18, 19, 21-23
7. Chapter 13 (Wired LANs: Ethernet): page 395-402 (up to Physical Layer)
 - a. Exercise-12, 14, 18, 20
8. Chapter 14 (Wireless LANs): page 421-426 (Fragmentation, Addressing Mechanism excluded) , 429-431 (Hidden and Exposed Station Problems), 434-438 (Bluetooth)
9. Chapter 15 (Connecting LANs, Backbone Networks, and Virtual LANs): page 445-450 (spanning tree excluded), 454-460 (from Two Layer Switch)
 - a. Exercise-1-10, 15
10. Chapter 19 (Network Layer: Logical Addressing): page 549-568 (up to Address Space)
 - a. Exercise-17-23, 30-32
11. Chapter 20 (Network Layer: Internet Protocol): page 579-594 (up to checksum)
 - a. Exercise-13-15
12. Chapter 21 (Network Layer: Address Mapping, Error Reporting, and Multicasting): page 611-630 (up to IGMP)
 - a. Exercise-14-16
13. Chapter 22 (Network Layer: Delivery, Forwarding, and Routing): page 647-678 (up to Multicast Routing Protocols)
 - a. Exercise-3-8, 16
14. Chapter 30 (Cryptography): slide and related sections from the book. Page 931-943, 949-950
 - a. Exercise-3-7, 10, 14-17, 25, 26, 28, 29

Computer Networks: Andrew S. Tanenbaum

1. Switching: Photocopy provided
2. DNS: Photocopy provided